Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-38 (canceled).

39. (previously presented): An organic light emitting device comprising an anode, a cathode

and an emissive layer, wherein the emissive layer is located between the anode and the

cathode and the emissive layer comprises an electron transporting host material doped with a

phosphorescent dopant material, wherein the phosphorescent dopant material has a HOMO

energy less than the ionization potential of the electron transporting host material, wherein

the electron transporting host material has a lowest triplet excited state having a triplet state

energy, and wherein the phosphorescent dopant material has a triplet excited state with a

triplet state energy that is less than the triplet state energy of the lowest triplet excited state of

the electron transporting host material.

40. (previously presented): The organic light emitting device of claim 39 wherein the

phosphorescent dopant material has a LUMO energy level lower than a LUMO energy level

of the electron transporting host material.

41. (previously presented): The organic light emitting device of claim 39 wherein the

electron transporting host material comprises an aryl-substituted oxadiazole.

42. (currently amended): The organic light emitting device of claim 41 wherein the aryl-

substituted oxadiazole comprises 1,3-bis (N,N-t-butyl-phenyl) 1,3,4-oxadiazole a compound

represented by

43. (previously presented): The organic light emitting device of claim 39 wherein the electron transporting host material comprises an aryl-substituted triazole.

- 44. (previously presented): The organic light emitting device of claim 43 wherein the aryl-substituted triazole comprises 3-phenyl-4-(1'-naphthyl)-5-phenyl-1,2,4-triazole.
- 45. (previously presented): The organic light emitting device of claim 39 wherein the electron transporting host material comprises an aryl-substituted phenanthroline.
- 46. (previously presented): The organic light emitting device of claim 45 wherein the aryl-substituted phenanthroline comprises 2,9-dimethyl-4,7-diphenyl-1,10-phenanthroline.
- 47. (previously presented): The organic light emitting device of claim 39 wherein the electron transporting host material comprises a benzoxazole or benzothiazole compound having the chemical structure:

Appl. No. 10/698,233 Response to November 25, 2005 Office Action Page 9

$$\left(\begin{array}{c} R_{3} \\ R_{2} \\ R_{1} \\ \end{array}\right) \begin{array}{c} R_{4} \\ R_{5} \\ \end{array}\right) \begin{array}{c} R_{5} \\ R_{7} \\ R_{8} \\ \end{array}$$

where X and Y are independently O, S;

M represents a metal;

n is a integer from 1 to 3; and

R₁ to R₈ are, independently, a hydrogen atom, an aryl group or an alkyl group.

48. (previously presented): The organic light emitting device of claim 39 wherein the electron transporting material comprises a zinc benzoxazole compound having the chemical structure:

49. (previously presented): The organic light emitting device of claim 39 wherein the phosphorescent dopant material comprises fac-tris (2-phenylpyridine)-iridium.

50. (previously presented): An organic light emitting device comprising:

a substrate;

an anode layer over said substrate;

a hole transporting layer over said anode layer;

a first electron transporting layer over said hole transporting layer, wherein said first electron transporting layer comprises an electron transporting host material doped with a phosphorescent dopant material,

wherein the phosphorescent dopant material has a HOMO energy less than the ionization potential of the electron transporting host material, wherein the first electron transporting host material has a lowest triplet excited state having a triplet state energy, and wherein the phosphorescent dopant material has a triplet excited state with a triplet state energy that is less than the triplet state energy of the lowest triplet excited state of the first electron transporting host material;

a second electron transporting layer over said first electron transporting

layer; and

a cathode layer over said second electron transporting layer.

- 51. (previously presented): The organic light emitting device of claim 50 wherein the phosphorescent dopant material has a LUMO energy level lower than a LUMO energy level of the electron transporting host material.
- 52. (previously presented): The organic light emitting device of claim 50 wherein the electron transporting host material comprises an aryl-substituted oxadiazole.
- 53. (currently amended): The organic light emitting device of claim 52 wherein the aryl-substituted oxadiazole comprises 1,3 bis (N,N t butyl-phenyl) 1,3,4-oxadiazole a compound represented by

54. (previously presented): The organic light emitting device of claim 50 wherein the electron transporting host material comprises an aryl-substituted triazole.

55. (previously presented): The organic light emitting device of claim 54 wherein the aryl-substituted triazole comprises 3-phenyl-4-(1'-naphthyl)-5-phenyl-1,2,4-triazole.

56. (previously presented): The organic light emitting device of claim 50 wherein the electron transporting host material comprises an aryl-substituted phenanthroline.

57.(previously presented): The organic light emitting device of claim 56 wherein the aryl-substituted phenanthroline comprises 2,9-dimethyl-4,7-diphenyl-1,10-phenanthroline.

58. (previously presented): The organic light emitting device of claim 50 wherein the electron transporting host material comprises a benzoxazole or benzothiazole compound having the chemical structure:

$$\begin{pmatrix} R_3 & R_4 & R_5 & R_6 \\ R_2 & N & R_8 & R_8 \end{pmatrix}_{n}$$

Appl. No. 10/698,233 Response to November 25, 2005 Office Action Page 12

where X and Y are independently O, S;

M represents a metal;

n is a integer from 1 to 3; and

R₁ to R₈ are, independently, a hydrogen atom, an aryl group or an alkyl group.

59. (previously presented): The organic light emitting device of claim 50 wherein the electron transporting material comprises a zinc benzoxazole compound having the chemical structure:

60. (previously presented): The organic light emitting device of claim 50 wherein the phosphorescent dopant material comprises fac-tris (2-phenylpyridine)-iridium.